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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,964	06/23/2000	Shiro Mazawa	Hitachi-0008	1581

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EXAMINER

QUINONES, ISMAEL C

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,964

Applicant(s)

MAZAWA ET AL.

Examiner

Ismael Quiñones

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 25, 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☒ Claim(s) 1, 5, and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement filed *June 23, 2000* fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

3. **Claim 1** is objected to because of the following informalities: "characteristics" is mentioned as a plural but is referenced as a singular. Appropriate correction is required.

4. **Claim 5** is objected to because of the following informalities: a stated second command signal, wherein a first command signal is neither specified in claim 5 or claim 1 in which this claim depends in order to have a second command signal. On the contrary a first command is specified on claim 4, therefore claim 5 should depend upon claim 4. Appropriate correction is required

5. **Claim 9** is objected to because of the following informalities: It is unclear if the syntax order on the statement "emergency call again message" is the corresponding one ("emergency call message again"), based on the independent claim in which this one depends. The terminal usage limiting apparatus acts as a base station; therefore call generation wouldn't be associated

with base stations wherein such operation corresponds to the mobile terminal. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1-7, and 10-12** are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al. (U.S. Pat. No. 6,490,455).

Regarding **claims 1-2 and 10**, Park et al. disclose a terminal usage limiting apparatus for temporary use with a mobile terminal communication (An apparatus/method for means of mobile phone prohibited usage; *col. 1, lines 7-11*); comprising a signal transmitter for transmitting a signal in a predetermined area where the use of the mobile terminal is restricted (A pseudo base station/"dummy" signal for transmission in a detected area; *col. 2 lines 15-17; col. 4, lines 37-41*), the signal having a characteristic that is substantially indistinguishable from that of a base station (pseudo/"dummy" base station signal generated for transmission; *col. 2 lines 15-16*), a message generator connected to said signal transmitter for generating said signal (A message such as an alarm; *col. 5, lines 49-52; Figure 3, item 500*) which includes

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information identifying the terminal usage limiting apparatus such as a base station ID (A pilot signal comprising the base station own PN code offset information; *col. 4, lines 10-13*), and a pseudo control information message indicative of the limited use of the mobile terminal (Control information messages such as exchange signals for the purpose of registration between the mobile phone and the base station and alerting messages to the notify the said mobile phone prohibited usage; *col. 1, lines 28- 34; col. 4, lines 37-41; col. 9, lines 33-46*).

Regarding **claim 3** and as applied to claim 1, Park et al. disclose the terminal limiting apparatus mentioned above, wherein said pseudo control information message includes a handoff prompt signal indicative of a switch from a base station to the terminal usage limiting apparatus (A pilot signal sent from the pseudo base station to the mobile phone for means of coverage responsibility once the parameters on the mobile phone are updated to those of the current base station, wherein the base station is a pseudo base station; *col. 4, lines 10-24*).

Regarding **claims 4-5**, and as applied to claim 1, Park et al. disclose the aforementioned terminal limiting apparatus wherein said message generator generates a first command signal for disabling transmission from the mobile terminal (An alarm generated from the pseudo base station alarm generating unit based upon detection of the mobile phone on the detection area, *col. 5, lines 46-52*), and a second command signal indicative of a longer interval for receiving said signal at the mobile terminal (A periodically transmitting basis for means of transmitting the overhead channel signal

once the system configuration is updated, subsequently saving power consumption; *col. 7, lines 49-56*).

Regarding **claims 6-7**, and as applied to claim 1, Park et al. disclose the aforementioned terminal limiting apparatus comprising: an access demodulator for demodulating a signal that is received from the mobile terminal (The signal received at the pseudo base station antenna is down-converted to baseband, filtered, and demodulated by a forward demodulator; *col. 7, lines 34-42*); and a message analyzer connected to said access channel demodulator for analyzing the demodulated signal determining that said signal is a call originating message (RF signals such as originating calls/messages from the mobile phone made from the access channel to the pseudo base station, once the signals are dispread by the forward demodulator they are analyzed in order to generate a pseudo base station signal that contains undistinguishable information; *col. 7, lines 20-26; col. 7, lines 42-48*).

Regarding **claim 11**, and as applied to claim 6, Park et al. disclose the aforementioned terminal limiting apparatus further comprising: a memory unit for storing information on base stations located near the terminal usage limiting apparatus An apparatus for analyzing neighboring base stations, *col. 5, lines 37-39, item 200, Fig. 3, detailed description of item 200 in Fig. 4*, wherein that information is stored on memory; *item 260, Fig. 3; col. 5, lines 40-41*); and a deciding device connected to said memory unit for determining a unique one of said signal which includes information identifying the terminal usage limiting apparatus based upon the information stored (A pseudo base

station signal generated based on the neighboring base station information; *col. 5, lines 37-46*).

Regarding **claim 12**, and as applied to claim 11, Park et al. disclose the aforementioned terminal usage limiting apparatus, further comprising a pilot strength measuring device connected to said memory unit for measuring the strength of a pilot signal and updating the base unit information on the memory unit (an apparatus for analyzing neighboring base stations also analyzes the signal strengths of the respective pilot signals and stores the signal strength information in memory, *col. 7, lines 27-29*); and an idle handoff deciding device connected to said memory unit for determining whether or not to execute an idle handoff operation based upon the base unit information (Once the pseudo base station signal is generated based upon the neighboring base station information taking in consideration that this signal is the highest in power/strength relative to the neighboring base stations a paging/synch channel is generated and the mobile phone tunes to said paging/synch channel to begin the location registration process; *col. 7, lines 27-33; col. 7, line 61 thru col. 8, line 5; col. 8, line 51 thru col. 9, line 4*).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 8-9, and 20-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Park et al. (U.S. Pat. No. 6,490,455) in view of Kaneko (JP 10-304430).

Regarding claims **8-9 and 20**, Park et al. disclose a terminal usage limiting apparatus/method for use in a restricted area, comprising a receiver for receiving a signal for wireless communications, and periodically transmitting to a mobile terminal a signal including the unique station information in predetermined area (A registration process in which a pseudo base station signal with unique information is involved; *col. 7, lines 53-56; col. 4, lines 52-55*). Park et al. fail to disclose a restricted phone memory for storing a predetermined list of phone numbers that are allowed to call in the restricted area, an emergency call deciding device connected to a message analyzer and said restricted phone number memory for determining whether or not a requested phone number to the predetermined list in response to a call origination message from said message analyzer; and a hand-off directing device connected to said emergency call deciding device and said message generator for directing said message generator to generate an emergency

call hand-off message in response to the emergency call hand-off message including base station ID information on an available base station.

However in the same field on endeavor, Kaneko discloses a terminal usage limiting apparatus/method that stores a predetermined list/set of emergency calls (A plurality of urgent numbers such as police, fire department, etc.; *Page 4, Paragraph 24*), and emergency call deciding device to a message analyzer and said restricted phone memory for determining whether or not the a requested phone number is a call origination request to one of the predetermined list/set of emergency calls (Judgment is made based on the judged information in which the judged information relies upon urgency/emergency numbers; *Page 4, Paragraphs 24-25*); and handing off the mobile terminal to an available base station so that the mobile terminal retransmits the signal to the base station (if the requested originating call is judged to be an urgency/emergency call type, the mobile terminal is handed over to another base station, wherein if it is not an emergency call a limit routine is carried to the mobile terminal ; *Page 4, Paragraphs 24-26*).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention was made to have Park et al. pseudo base station for means of restricting mobile communications in a prohibited/restricted zone include Kaneko emergency call judgment routine. For the purpose of enabling communications in a prohibited/restricted zone when an emergency call is performed within it.

Regarding **claims 21-23**, and as applied to claim 20, Park et al. in view of Kaneko disclose a terminal limiting apparatus/method with an emergency call judgment routine

aforementioned. In addition Park et al. disclose wherein the terminal limiting apparatus/method periodically transmits a signal indicative of limited use to a mobile terminal (*col. 7, lines 53-56*), wherein the said apparatus/method periodically collects information on the base station located near the transmission source stored it and updates the unique station /terminal usage limiting apparatus information for identifying the transmission source based upon the updated collected information (*col. 7, lines 53-56; col. 4 lines 52-55*).

Regarding **claim 24** and as applied to claim 20, Park et al. in view of Kaneko disclose a terminal usage limiting apparatus/method for restricting the use of a mobile terminal in a predetermined area. In addition Park et al. disclose the base station transmits the signal that is the strongest in transmission power with respect to the mobile terminal (*col. 7, lines 28-33*).

Regarding **claims 25-27, and 29**, and as to claim 20, Park et al. in view of Kaneko disclose the aforementioned apparatus/method for restricting the use of a mobile terminal in predetermined area. In addition Kaneko discloses wherein a rejection message is sent to the mobile terminal in response to the call rejection and said message is communicated to a user in visual, and auditory fashion through the mobile terminal (Processing such as an output alarm sound, or a display communication form; *Page 4, Paragraphs 19-20; Page 4, Paragraph 27*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Park et al. apparatus/method for restricting mobile communications usage in a predetermined area to include alerting means features such as

auditory and visual communication responses as taught by Kaneko, for the purpose of providing as well alternative alerting means to direct the user's attention to the device when entering a restricting/prohibited wireless communication zone.

Regarding **claim 28**, and as applied to claim 20, Park et al. in view of Kaneko disclose a pseudo base station/terminal usage limiting apparatus for means of restricting mobile communications in a prohibited/restricted zone, wherein a urgency/emergency judgment routine for enabling communications in a prohibited/restricted zone is performed based on the a list of urgency/emergency numbers stored for assessment. Park et al. in view of Kaneko also disclose a communication fashion to a mobile terminal from said apparatus indicating limited usage within a restricted area. Park et al in view of Kaneko fail to disclose wherein said communication fashion is tactile such as a one of a vibrating type.

However, the examiner takes Official Notice that features of a tactile type such as a vibrating alert was old and well known in the art for mobile communications terminal devices.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Park et al. in view of Kaneko apparatus/method for the purpose of restricting mobile communications usage in a predetermined area to include tactile fashion features such as a vibrating alert to provide alternative alerting means to direct the user's attention to the device.

10. **Claims 13-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Park et al. (U.S. Pat. No. 6,490,455) in view of Kaneko (JP 10-304430), further in view of Pelech et al. (U.S. Pat. No. 6,243,585).

Regarding **claim 13**, Park et al. in view of Kaneko disclose a mobile terminal for use in a restricted area with a terminal usage limiting apparatus. In addition, Kaneko discloses wherein said terminal usage limiting apparatus/auxiliary device comprises a receiver for receiving a signal for wireless communications (An antenna that receives a signal emitted from the mobile communications terminal; *Page 3, Paragraph 15*), a phone number memory unit for storing a list of emergency numbers (A plurality of urgent numbers such as police, fire department, etc.; *Page 4, Paragraph 24*), an emergency deciding device connected to said phone number memory unit for determining whether or not a requested phone number is an emergency by comparing the requested phone number to the predetermined emergency numbers (Judgment is made based upon the judged information related to urgency/emergency numbers; *Page 4, Paragraph 24-25*); a message generator connected to said emergency deciding device for generating an emergency signal indicative of emergency in response to said emergency deciding device (A radio transmission signal sent to the mobile terminal which restricts direct usage; *Page 4, Paragraphs 24-27*); a transmitter connected to said message generator for transmitting said emergency signal (A limit usage request signal based on the judged information transmitted to the mobile terminal; *Page 4, Paragraph 25*). Park et al. in view of Kaneko fail to disclose a mobile terminal comprising the above-mentioned features.

However in the same field of endeavor, Pelech et al. disclose a wireless communications network in which all facilities such as base stations are mobile for means of enhancing the network capacity performance (*col. 2, lines 31-33; col. 6, lines 18-22*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Park et al. in view of Kaneko auxiliary device to restrict usage in a restricted area utilizing a mobile terminal such as a mobile terminal usage limiting apparatus (pseudo base station/auxiliary device) as taught by Pelech et al.. For the purpose of allocating the terminal usage limiting apparatus (pseudo base station/auxiliary device) portable/mobile where the need for restricted use is unfixed from one predetermined area to another.

Regarding **claim 14**, and as applied to claim 13, Park et al. in view of Pelech et al. disclose the aforementioned mobile terminal. In addition Park et al. disclose said mobile terminal comprising a message analyzer connected to said receiver for analyzing the signal received from the mobile terminal usage limiting apparatus (the mobile phone analyzes the information signal received from the pseudo base station; *col. 8, lines 58-66*), the received signal including a disable message (A signal for means of generating an alarm from the pseudo base station alarm unit, based upon detection of the mobile phone on the restricted area, *col. 5, lines 46-52*). Park et al. in view of Pelech fail to disclose a mobile terminal further comprising a transmitter stop-directing device connected to said message analyzer.

However in the same field on endeavor, Kaneko discloses the aforementioned mobile terminal further comprising a transmitter stop directing device connected to said message analyzer for disabling said transmitter in response to the transmitter disable message (the mobile terminal is set to reception mode only automatically once it has entered the restricted area; *Page 5, Paragraph 28*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Park et al. in view of Pelech mobile terminal comprising the features specified above to include Kaneko transmitter stop directing device, for the purpose of disabling the mobile terminal usage for means of enforcing restriction.

Regarding **claim 15**, and as applied to claim 13, Park et al. in view of Kaneko and further in view of Pelech et al. disclose a mobile terminal for use in a restricted area. In addition Park et al. disclose said mobile terminal comprising a pilot strength measuring device connected to said receiver for measuring the strength of a pilot signal from a base station (the mobile phone recognizes that has entered a new predetermined area, based on a received signal pilot from the pseudo base station containing said area unique ID information; *col. 5, lines 2-4; col. 8, lines 51-54*) and the terminal usage limiting apparatus; and a hand-off deciding device connected to said pilot strength measuring device for switching between the base station and the terminal usage limiting apparatus based upon the measured strength of the pilot signal (The mobile station tunes to a base station based on signal strength criteria; *col. 4, lines 14-21*), whereby the use of the mobile terminal is restricted while the mobile terminal receives the signal from the

terminal usage limiting apparatus (The pseudo/dummy base station sends a signal to the mobile terminal to mislead the mobile terminal into transmitting a location registration signal; *col. 4, lines 37-41*).

Regarding **claims 16-17**, and as applied to claim 13, Park et al. in view of Kaneko and further in view of Pelech et al. disclose the aforementioned apparatus for restricting the use of a mobile terminal in predetermined area. In addition Kaneko discloses wherein a rejection message is sent to the mobile terminal in response to the call rejection and said message is communicated to a user in visual, and auditory fashion through the mobile terminal (Processing such as an output alarm sound, or a display communication form; *Page 4, Paragraphs 19-20; Page 4, Paragraph 27*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Park et al. in view of Pelech et al. mobile apparatus/method for restricting mobile communications usage in a predetermined area to include alerting means features such as auditory and visual communication responses as taught by Kaneko, for the purpose of providing as well alternative alerting means to direct the user's attention to the device when entering a restricting/prohibited wireless communication zone.

Regarding **claims 18-19**, and as applied to claim 13, Park et al. in view of Kaneko and further in view of Pelech et al. disclose a pseudo base station/terminal usage limiting apparatus for means of restricting mobile communications in a prohibited/restricted zone, wherein a urgency/emergency judgment routine for enabling communications in a prohibited/restricted zone is performed based on the a list of urgency/emergency numbers

stored for assessment. Park et al. in view of Kaneko and further in view of Kaneko also disclose a communication fashion to a mobile terminal from said apparatus indicating limited usage within a restricted area. Park et al in view of Kaneko fail to disclose wherein said communication fashion is tactile such as a one of a vibrating type.

However, the examiner takes Official Notice that features of a tactile type such as a vibrating alert was old and well known in the art for mobile communications terminal devices.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Park et al. in view of Kaneko and further in view of Pelech et al. apparatus for the purpose of restricting mobile communications usage in a predetermined area to include tactile fashion features such as a vibrating alert to provide alternative alerting means to direct the user attention to the device.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- i. Uhlik et al. (U.S. Pat. No. 6,600,914)
- ii. Verdonk (U.S. Pat. No. 6,249,674)
- iii. Steer et al. (U.S. Pat. No. 6,343,213)

12. Any response to this Office Action should be **faxed to** (703) 872-9314 or **mailed to**:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to

Crystal Park II
2021 Crystal Drive
Arlington, VA 22202
Sixth Floor (Receptionist)

13. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

14. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q.

December 3, 2003

Marsha D. Banks-Harold
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